Name: Dr. Shivangi Viral Thakker			E-mail:shivangiruparel@somaiya.edu			
<b>Contact No:</b>		66449513				
Department/S	ection: N	Iechanical Engineering				
College: K J Somaiya College of Engineering						
DOJ Somaiy 2005	a: Jan	Career Experience:15+ Yrs	Industry Ex	xperience: 0 Yrs	Teaching 19 Yrs	Experience:
Present Academic Designation: Assistant Professor		Present Ada Associate H	ministrative Desig HOD	nation:		

### Area of research/specialization and Courses Delivered

### Research domain/interests/areas

- 1. Supply chain management
- 2. Sustainable manufacturing and development
- 3. Waste management

#### Courses Delivered

- 1. Industrial Engineering and management
- 2. Sustainable manufacturing
- 3. Failure analysis
- 4. Supply chain management

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions			
1. UG teacher recognized by MU and SVU			
2. PG teacher recognized by SVU			
3. Ph.D Guide recognized by SVU			

Education					
Examination	Name of the	University/Board	Institute/College	Year	CPI/SPI/
	Degree				%Marks
Ph.D	Doctorate in	Mumbai	SPCE, Andheri	2021	9.8
	Technnology				
PG	M.E	Mumbai	K J Somaiya college of	2012	80%
			Engineering		
UG	B.E	Mumbai	Datta Meghe College of	2004	64%
			Engineering		
HSC	HSC	Mumbai	K.J.Somaiya college of	2000	70.83%
			science and commerce		

	Notable Experience Details					
Sr. No	Name of the	Designation	Date of Joining	Date of Leaving	Experience	
	organization				(Years)	
1.	K J Somaiya college	Asst. Prof	Jan 2005	Till date	19	
	of Engineering					

Research Accomplishments and Projects			
No of students pursuing Ph.D as on date: NIL  No of students completed Ph.D as on date:			
No of students comple	eted PG thesis / Project work as on	No of students / groups completed UG	
date: 4		projects as on date:20	
Publications	Number of Peer review Journal	Number of Conference papers:10	
Total:16	papers: 6		

Details of Publications:

#### **International Journals**

- Shivangi Viral Thakker, Santosh B. Rane, (2018) "Implementation of green supplier development process model in Indian automobile industry", Management of Environmental Quality: An International Journal, Vol. 29 Issue: 5, pp.938-960, https://doi.org/10.1108/MEQ-03-2018-0052
- 2. Rane, S.B. and Thakker, S.V. (2019), "Green procurement process model based on blockchain—IoT integrated architecture for a sustainable business", Management of Environmental Quality, Vol. 31 No. 3, pp. 741-763. https://doi.org/10.1108/MEQ-06-2019-0136.
- 3. Rane, S.B., **Thakker, S.V**. and Kant, R. (2021), "Stakeholders' involvement in green supply chain: a perspective of blockchain IoT-integrated architecture", Management of Environmental Quality, Vol. 32 No. 6, pp. 1166-1191. https://doi.org/10.1108/MEQ-11-2019-0248
- 4. Thakker, S.V., Parab, J. and Kaisare, S. (2021), "Systematic research of e-learning platforms for solving challenges faced by Indian engineering students", Asian Association of Open Universities Journal, Vol. 16 No. 1, pp. 1-19. https://doi.org/10.1108/AAOUJ-09-2020-0078
- 5. Gohil, D. and Thakker, S.V. (2021), "Blockchain-integrated technologies for solving supply chain challenges", Modern Supply Chain Research and Applications, Vol. ahead-of-print No. ahead-of-print. <a href="https://doi.org/10.1108/MSCRA-10-2020-0028">https://doi.org/10.1108/MSCRA-10-2020-0028</a>
- 6. **Thakker, S.V.,** Rane, S.B. and Narwane, V.S. (2024), "Implementation of blockchain IoT-based integrated architecture in green supply chain", Modern Supply Chain Research and Applications, Vol. 6 No. 2, pp. 122-145. https://doi.org/10.1108/MSCRA-01-2023-0005

#### Conferences

- 1. Shivangi Ruparel, Sangita Bansode, Paresh Tulankar, "Analysis of transient thermal stresses in a delayed coke drum", 31st May 2012 to 2nd June 2012, International conference on Recent Advances In Engineering, Technology And Management, Sardar patel college of Engineering, Mumbai
- 2. Shivangi Ruparel, Sangita Bansode, "Fitness for service evaluation of bulging in a Delayed coke drum", 8thto 10th December 2011, International conference on Current trends in Technology, Nirma University, Ahmedabad
- 3. R.R. Lekurwale, (Dr.) G. V. Shah, Shivangi Ruparel, "Life Cycle Issues In Product Design and Manufacturing", 10th to 12th November 2011, International conference on sustainable manufacturing- issues trends and practices (ICSM2011), Birla Institute of Technology and Science, Pilani (BITS Pilani)
- 4. Shivangi Thakker, Dr. Santosh Rane, "Green Procurement Modelling using Fuzzy Logic and MCDM Methods", paper presentation in International Conference on 'Smart Strategies for Digital World Industrial Engineering Perspective' by IIIE, at Shri Ramdeobaba College of Engineering & Management, Nagpur, 21-22 October 2016.
- 5. Shivangi Thakker, Dr. Santosh Rane, Formulation of strategies for Performance improvement of Green supply chain using balanced score card method Convention of IIIE & International Conference, Odisha, September 2018, SCM- 20193, pp-94.
- 6. Shivangi Thakker, Dr. Santosh Rane, Performance improvement of Green supply chain using balanced score card method ISDSI, 12th annual International conference, SPJIM, Mumbai, December 2018, Paper No- 452, pp-44.

- 7. Shivangi Thakker, Dr. Santosh Rane, Performance Evaluation of Green supply chain using Fuzzy TOPSIS and Balanced Scorecard Method Engineering (ICIE 2019), SVNIT, Surat, India 8, pp-66-70. 5th International Conference on Industrial December 2019, ISBN: 978-93-86238-81-
- 8. Awadhesh Kumar Yadav, Shivangi V. Thakker (Proceedings of ICIE 2019), Design and Analysis of Pneumatic Compression Moulding Machine, 5th International Conference on Industrial Engineering, pp 852-856, ISBN: 978-93-86238-81-8
- 9. Chaudhari, P., Thakker, S. (2021). Biogas Generation by Utilizing Agricultural Waste. In: Pawar, P.M., Balasubramaniam, R., Ronge, B.P., Salunkhe, S.B., Vibhute, A.S., Melinamath, B. (eds) Techno-Societal 2020. Springer, Cham. <a href="https://doi.org/10.1007/978-3-030-69921-5">https://doi.org/10.1007/978-3-030-69921-5</a> 82
- 10. Shivangi Thakker, Shweta Pandey, (2024), Development of Sustainable Tableware Materials Produced with Agricultural waste, ICTEAH- International conference on technologies for Energy, Agriculture and healthcare at KJSCE, Mumbai.

No of Research / consultancy /	No of Research / consultancy /	No of Research / consultancy /
projects completed: 1	projects on-going:1	projects on applied as on date:
Rs: 50,000	Rs <u>:</u> 53,10,000	Rs <u>: 27,04,000</u>

#### Details of Research / consultancy / projects:

#### Completed

1. Design and Development of Green packaging material from Sugarcane Bagasse to replace Bubble wraps Mumbai University, Minor Research Grant, University letter No. ADP/237/323 of 2018 dated 23/03/2018

#### On-going

1. Utilization of Paddy straw for making Paper and Tableware using novel pulping technique, DST, TDT division, Government of India, DST/TDT/WMT-3/Rice Husk to Paddy Rice

#### Ongoing

1. Green Hydrogen Production using PEM electrolyser, Somaiya Vidyavihar University, Rs. 3,00,000/-

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

#### Attended

- 1. One week ISTE approved STTP on, "Renewable energy systems and technology", by Mechanical engineering department, K J Somaiya College of Engineering, from 29th June 2009 to 3rd July 2009.
- 2. One week ISTE approved STTP on, "Core Java", by Information Technology department, K J Somaiya College of engineering, from 21st June 2010 to 25th June 2010.
- 3. Two week ISTE approved STTP on, "Computational Fluid dynamics" by IIT Bombay from 12th June 2012 to 22nd June 2012 under the National Mission on Education through ICT (MHRD, Govt. of India). The course was attended at Remote centre K J Somaiya college of Engineering.
- 4. Two- Days ISTE approved Workshop on "Aakash For Education", under the National Mission on Education through ICT (MHRD, Govt. of India) conducted by IIT Bombay, from 10th Nov. 2012 to 11th Nov. 2012 at the remote centre K. J. Somaiya College of Engineering.
- 5. Two week ISTE approved STTP on, "Technical Communication for Scientists and Engineers", by IIT Bombay from 8th October to 8th November and 30th November to 5th December 2015 under the National Mission on Education through ICT (MHRD, Govt. of India). One week Online and one week Face to face attended at Remote Centre K J Somaiya college of Engineering.
- 6. Two day Practice Leader Forum on "Innovations in Manufacturing operations to enhance firm performance" at NITIE, Mumbai in association with POMS USA from 18th 19th December 2015.
- 7. Two day workshop on "Statistical analysis using R software" at K J Somaiya College of Science and Commerce, Vidyavihar from 26th 27th August 2016.

- 8. Two day Seminar on "Make in India: Igniting manufacturing Renaissance" at D J Sanghvi College of Engineering, 31st March to 1st April 2016.
- 9. One day workshop on "Parallel computing with GPUs", by IIT Bombay, at K J Somaiya college of Engineering, 4th October 2016.
- 10. Innovations in manufacturing Operations to enhance Firm performance NITIE, POMS (USA), 18th 19th December 2015, (2 days), Recent advances in manufacturing and operations for improving performance of industries were discussed.
- 11. Statistical analysis using R software K J Somaiya College of Science and Commerce 26th 27th August 2016, (2 days)
- 12. Make in India: Igniting manufacturing Renaissance D J Sanghvi College of Engineering, Mumbai31st March 1st April 2016 (2 days)
- 13. Innovation, Entrepreneurship and Incubators, TEQUIP course IIT Bombay 14th -18th March, 2017 (1 week), Received second prize for presentation on "Business canvas model on Green materials in packaging".
- 14. Software Flexsim, KJSCE, Mumbai 22nd -23rd June, 2017, (2 days).
- 15. Multi criteria decision making in Manufacturing, K K Wagh Institute of Engineering education and research, Nashik 26th-28th May 2020, (3 Days), MCDM Methods like TOPSIS, VIKOR were demonstrated with case studies to utilise in survey based research.
- 16. Role of Technology transfer in driving innovation, M H Saboo Siddik college of Engineering, Mumbai, 30th May 2020 (1 day), Knowledge about IP patenting and transfer of IP.
- 17. One week Online Faculty Development Program (FDP) on "Exploring the Dimensions of Innovation, Incubation and Emerging Technologies to Embrace Post COVID Changes", Organized by Department of Mechanical Engineering from 08th June to 12th June 2020.
- 18. One Week National level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research, organised by the DST-CURIE-AI center of Sri Padmavati Mahila Visvavidyalayam (SPMVV University), Tirupati in association with ipsr solutions limited from 18 March 2024 to 23 March 2024
- 19. One week IPR awareness and skill development- Patents and Start ups, 16-20 March 2024, by NIT Mizoram sponsored by MISTIC

### Organized

- 1. Cognizance of Industry 4.0 towards implementation and security KJSCE, Mumbai 30th Dec 2019- 4th Jan 2020, (1 week), Organizing this STTP enabled to get in contact with various experts and know in depth about Industry 4.0 and IoT.
- 2. One day symposium organized on "Awareness to action- Single use plastic" on 22<sup>nd</sup> Feb 2022 sponsored by DST, India.
- 3. One week STTP organized on, "Sustainable research and development" from 2-6 Jan 2024 at KJSCE partially funded by DST, India.

	Notable Key Scholastic Achievements		
1.	Best PhD Thesis award		
2.	Received grants from Mumbai University, DST and SVU		

Date: 5 / 09 / 2024

Notable Positions and Responsibility		
1.	Associate Head of Department, mechanical	
2.	Student activities and Internship Coordinator, Mechanical	

**Signature of Faculty Member**